Statement of Basis of the Federal Operating Permit

INVISTA S.à r.l.

Site Name: INVISTA S.a r.l. Orange Site Area Name: Adipic/HMD/Nitric/Powerhouse Physical Location: 3055A FM 1006 Nearest City: Orange County: Orange

> Permit Number: O1898 Project Type: Renewal

The North American Industry Classification System (NAICS) Code: 325199
NAICS Name: All Other Basic Organic Chemical Manufacturing

This Statement of Basis sets forth the legal and factual basis for the draft permit conditions in accordance with 30 TAC §122.201(a)(4). Per 30 TAC §§ 122.241 and 243, the permit holder has submitted an application under § 122.134 for permit renewal. This document may include the following information:

A description of the facility/area process description;

A basis for applying permit shields;

A list of the federal regulatory applicability determinations;

A table listing the determination of applicable requirements;

A list of the New Source Review Requirements;

The rationale for periodic monitoring methods selected;

The rationale for compliance assurance methods selected;

A compliance status; and

A list of available unit attribute forms.

Prepared on: February 13, 2019

Operating Permit Basis of Determination

Permit Area Process Description

Hexamethylene diamine (HMD) is manufactured in the permit area. The permit area also contains the powerhouse facility, consisting of three boilers that produce 550 psig steam for plant processes. The boilers burn waste gas and liquid streams from plant processes. Natural gas is used for supplementary firing. Emission sources in the permit area include boiler stacks and other stationary vents, fugitive sources, storage tanks, loading/unloading operations, distillation columns, and reactors.

Crude hexamethylene diamine (HMD) is produced by continuous hydrogenation of adiponitrile (ADN) in the presence of ammonia and hydrogen in a fixed bed of iron catalyst at high pressure and moderate temperature. The ammonia is added to absorb the exothermic heat of reaction and suppress by-products formation. The HMD manufacturing facilities consist of a single line synthesis unit which contains the conversion step and the ammonia recycle step of the process. The refining unit consists of seven distillation columns which separate the by-products from the purified (refined HMD) product.

The ammonia, which is used to absorb most of the heat of reaction, is recycled back through the process. The ammonia recycle system utilized flash evaporation and air-cooled condensers to separate and recover dissolved ammonia from the HMD. Less than 0.5% of the dissolved ammonia remains in the crude HMD, which is the feed to the HMD refining unit. HMD by-products are separated during the process and are stored in the by-product tank farm. By-products which are not sold are burned in the SRW power facility boilers as fuel.

FOPs at Site

The "application area" consists of the emission units and that portion of the site included in the application and this permit. Multiple FOPs may be issued to a site in accordance with 30 TAC § 122.201(e). When there is only one area for the site, then the application information and permit will include all units at the site. Additional FOPs that exist at the site, if any, are listed below.

Additional FOPs: O1897

Major Source Pollutants

The table below specifies the pollutants for which the site is a major source:

Major Pollutants	VOC, NOX, HAPS, CO

Reading State of Texas's Federal Operating Permit

The Title V Federal Operating Permit (FOP) lists all state and federal air emission regulations and New Source Review (NSR) authorizations (collectively known as "applicable requirements") that apply at a particular site or permit area (in the event a site has multiple FOPs). **The FOP does not authorize new emissions or new construction activities.** The FOP begins with an introductory page which is common to all Title V permits. This page gives the details of the company, states the authority of the issuing agency, requires the company to operate in accordance with this permit and 30 Texas Administrative Code (TAC) Chapter 122, requires adherence with NSR requirements of 30 TAC Chapter 116, and finally indicates the permit number and the issuance date.

This is followed by the table of contents, which is generally composed of the following elements. Not all permits will have all of the elements.

- · General Terms and Conditions
- Special Terms and Conditions

- Emissions Limitations and Standards, Monitoring and Testing, and Recordkeeping and Reporting
- Additional Monitoring Requirements
- New Source Review Authorization Requirements
- Compliance Requirements
- Protection of Stratosphere Ozone
- Permit Location
- Permit Shield (30 TAC § 122.148)
- Attachments
 - Applicable Requirements Summary
 - Unit Summary
 - Applicable Réquirements Summary
 - Additional Monitoring Requirements
 - Permit Shield
 - New Source Review Authorization References
 - Compliance Plan
 - Alternative Requirements
- Appendix A
 - Acronym list

General Terms and Conditions

The General Terms and Conditions are the same and appear in all permits. The first paragraph lists the specific citations for 30 TAC Chapter 122 requirements that apply to all Title V permit holders. The second paragraph describes the requirements for record retention. The third paragraph provides details for voiding the permit, if applicable. The fourth paragraph states that the permit holder shall comply with the requirements of 30 TAC Chapter 116 by obtaining a New Source Review authorization prior to new construction or modification of emission units located in the area covered by this permit. The fifth paragraph provides details on submission of reports required by the permit.

Special Terms and Conditions

Emissions Limitations and Standards, Monitoring and Testing, and Recordkeeping and Reporting. The TCEQ has designated certain applicable requirements as site-wide requirements. A site-wide requirement is a requirement that applies uniformly to all the units or activities at the site. Units with only site-wide requirements are addressed on Form OP-REQ1 and are not required to be listed separately on a OP-UA Form or Form OP-SUM. Form OP-SUM must list all units addressed in the application and provide identifying information, applicable OP-UA Forms, and preconstruction authorizations. The various OP-UA Forms provide the characteristics of each unit from which applicable requirements are established. Some exceptions exist as a few units may have both site-wide requirements and unit specific requirements.

Other conditions. The other entries under special terms and conditions are in general terms referring to compliance with the more detailed data listed in the attachments.

Attachments

Applicable Requirements Summary. The first attachment, the Applicable Requirements Summary, has two tables, addressing unit specific requirements. The first table, the Unit Summary, includes a list of units with applicable requirements, the unit type, the applicable regulation, and the requirement driver. The intent of the requirement driver is to inform the reader that a given unit may have several different operating scenarios and the differences between those operating scenarios.

The applicable requirements summary table provides the detailed citations of the rules that apply to the various units. For each unit and operating scenario, there is an added modifier called the "index number," detailed citations specifying monitoring and testing requirements, recordkeeping requirements, and reporting requirements. The data for this table are based on data supplied by the applicant on the OP-SUM and various OP-UA forms.

Additional Monitoring Requirement. The next attachment includes additional monitoring the applicant must perform to ensure compliance with the applicable standard. Compliance assurance monitoring (CAM) is often required to provide a

reasonable assurance of compliance with applicable emission limitations/standards for large emission units that use control devices to achieve compliance with applicant requirements. When necessary, periodic monitoring (PM) requirements are specified for certain parameters (i.e. feed rates, flow rates, temperature, fuel type and consumption, etc.) to determine if a term and condition or emission unit is operating within specified limits to control emissions. These additional monitoring approaches may be required for two reasons. First, the applicable rules do not adequately specify monitoring requirements (exception- Maximum Achievable Control Technology Standards (MACTs) generally have sufficient monitoring), and second, monitoring may be required to fill gaps in the monitoring requirements of certain applicable requirements. In situations where the NSR permit is the applicable requirement requiring extra monitoring for a specific emission unit, the preferred solution is to have the monitoring requirements in the NSR permit updated so that all NSR requirements are consolidated in the NSR permit.

Permit Shield. A permit may or may not have a permit shield, depending on whether an applicant has applied for, and justified the granting of, a permit shield. A permit shield is a special condition included in the permit document stating that compliance with the conditions of the permit shall be deemed compliance with the specified potentially applicable requirement(s) or specified applicable state-only requirement(s).

New Source Review Authorization References. All activities which are related to emissions in the state of Texas must have a NSR authorization prior to beginning construction. This section lists all units in the permit and the NSR authorization that allowed the unit to be constructed or modified. Units that do not have unit specific applicable requirements other than the NSR authorization do not need to be listed in this attachment. While NSR permits are not physically a part of the Title V permit, they are legally incorporated into the Title V permit by reference. Those NSR permits whose emissions exceed certain PSD/NA thresholds must also undergo a Federal review of federally regulated pollutants in addition to review for state regulated pollutants.

Compliance Plan. A permit may have a compliance schedule attachment for listing corrective actions plans for any emission unit that is out of compliance with an applicable requirement.

Alternative Requirements. This attachment will list any alternative monitoring plans or alternative means of compliance for applicable requirements that have been approved by the EPA Administrator and/or the TCEQ Executive Director.

Appendix A

Acronym list. This attachment lists the common acronyms used when discussing the FOPs.

Stationary vents subject to 30 TAC Chapter 111, Subchapter A, § 111.111(a)(1)(B) addressed in the Special Terms and Conditions

The site contains stationary vents with a flowrate less than 100,000 actual cubic feet per minute (acfm) and constructed after January 31, 1972 which are limited, over a six-minute average, to 20% opacity as required by 30 TAC § 111.111(a)(1)(B). As a site may have a large number of stationary vents that fall into this category, they are not required to be listed individually in the permit's Applicable Requirement Summary. This is consistent with EPA's White Paper for Streamlined Development of Part 70 Permit Applications, July 10, 1995, that states that requirements that apply identically to emission units at a site can be treated on a generic basis such as source-wide opacity limits.

Periodic monitoring is specified in Special Term and Condition 3 for stationary vents subject to 30 TAC § 111.111(a)(1)(B) to verify compliance with the 20% opacity limit. These vents are not expected to produce visible emissions during normal operation. The TCEQ evaluated the probability of these sources violating the opacity standards and determined that there is a very low potential that an opacity standard would be exceeded. It was determined that continuous monitoring for these sources is not warranted as there would be very limited environmental benefit in continuously monitoring sources that have a low potential to produce visible emissions. Therefore, the TCEQ set the visible observation monitoring frequency for these sources to once per calendar quarter.

The TCEQ has exempted vents that are not capable of producing visible emissions from periodic monitoring requirements. These vents include sources of colorless VOCs, non-fuming liquids, and other materials that cannot produce emissions that obstruct the transmission of light. Passive ventilation vents, such as plumbing vents, are also included in this category. Since this category of vents are not capable of producing opacity due to the physical or

chemical characteristics of the emission source, periodic monitoring is not required as it would not yield any additional data to assure compliance with the 20% opacity standard of 30 TAC § 111.111(a)(1)(B).

In the event that visible emissions are detected, either through the quarterly observation or other credible evidence, such as observations from company personnel, the permit holder shall either report a deviation or perform a Test Method 9 observation to determine the opacity consistent with the 6-minute averaging time specified in 30 TAC § 111.111(a)(1)(B). An additional provision is included to monitor combustion sources more frequently than quarterly if alternate fuels are burned for periods greater than 24 consecutive hours. This will address possible emissions that may arise when switching fuel types.

Stationary Vents subject to 30 TAC Chapter 111 not addressed in the Special Terms and Conditions

All other stationary vents subject to 30 TAC Chapter 111 not covered in the Special Terms and Conditions are listed in the permit's Applicable Requirement Summary. The basis for the applicability determinations for these vents are listed in the Determination of Applicable Requirements table.

Federal Regulatory Applicability Determinations

The following chart summarizes the applicability of the principal air pollution regulatory programs to the permit area:

Regulatory Program	Applicability (Yes/No)
Prevention of Significant Deterioration (PSD)	No
Nonattainment New Source Review (NNSR)	No
Minor NSR	Yes
40 CFR Part 60 - New Source Performance Standards	No
40 CFR Part 61 - National Emission Standards for Hazardous Air Pollutants (NESHAPs)	Yes
40 CFR Part 63 - NESHAPs for Source Categories	Yes
Title IV (Acid Rain) of the Clean Air Act (CAA)	No
Title V (Federal Operating Permits) of the CAA	Yes
Title VI (Stratospheric Ozone Protection) of the CAA	Yes
CSAPR (Cross-State Air Pollution Rule)	No
Federal Implementation Plan for Regional Haze (Texas SO ₂ Trading Program)	No

Basis for Applying Permit Shields

An operating permit applicant has the opportunity to specifically request a permit shield to document that specific applicable requirements do not apply to emission units in the permit. A permit shield is a special condition stating that compliance with the conditions of the permit shall be deemed compliance with the specified potentially applicable

requirements or specified potentially applicable state-only requirements. A permit shield has been requested in the application for specific emission units. For the permit shield requests that have been approved, the basis of determination for regulations that the owner/operator need not comply with are located in the "Permit Shield" attachment of the permit.

Insignificant Activities

In general, units not meeting the criteria for inclusion on either Form OP-SUM or Form OP-REQ1 are not required to be addressed in the operating permit application. Examples of these types of units include, but are not limited to, the following:

- 1. Office activities such as photocopying, blueprint copying, and photographic processes.
- 2. Sanitary sewage collection and treatment facilities other than those used to incinerate wastewater treatment plant sludge. Stacks or vents for sanitary sewer plumbing traps are also included.
- 3. Food preparation facilities including, but not limited to, restaurants and cafeterias used for preparing food or beverages primarily for consumption on the premises.
- 4. Outdoor barbecue pits, campfires, and fireplaces.
- 5. Laundry dryers, extractors, and tumblers processing bedding, clothing, or other fabric items generated primarily at the premises. This does not include emissions from dry cleaning systems using perchloroethylene or petroleum solvents.
- 6. Facilities storing only dry, sweet natural gas, including natural gas pressure regulator vents.
- 7. Any air separation or other industrial gas production, storage, or packaging facility. Industrial gases, for purposes of this list, include only oxygen, nitrogen, helium, neon, argon, krypton, and xenon.
- 8. Storage and handling of sealed portable containers, cylinders, or sealed drums.
- 9. Vehicle exhaust from maintenance or repair shops.
- 10. Storage and use of non-VOC products or equipment for maintaining motor vehicles operated at the site (including but not limited to, antifreeze and fuel additives).
- 11. Air contaminant detectors and recorders, combustion controllers and shut-off devices, product analyzers, laboratory analyzers, continuous emissions monitors, other analyzers and monitors, and emissions associated with sampling activities. Exception to this category includes sampling activities that are deemed fugitive emissions and under a regulatory leak detection and repair program.
- 12. Bench scale laboratory equipment and laboratory equipment used exclusively for chemical and physical analysis, including but not limited to, assorted vacuum producing devices and laboratory fume hoods.
- 13. Steam vents, steam leaks, and steam safety relief valves, provided the steam (or boiler feedwater) has not contacted other materials or fluids containing regulated air pollutants other than boiler water treatment chemicals.
- 14. Storage of water that has not contacted other materials or fluids containing regulated air pollutants other than boiler water treatment chemicals.
- 15. Well cellars.
- 16. Fire or emergency response equipment and training, including but not limited to, use of fire control equipment including equipment testing and training, and open burning of materials or fuels associated with firefighting training.
- 17. Crucible or pot furnaces with a brim full capacity of less than 450 cubic inches of any molten metal.
- 18. Equipment used exclusively for the melting or application of wax.
- 19. All closed tumblers used for the cleaning or deburring of metal products without abrasive blasting, and all open tumblers with a batch capacity of 1,000 lbs. or less.
- 20. Shell core and shell mold manufacturing machines.
- 21. Sand or investment molds with a capacity of 100 lbs. or less used for the casting of metals;
- 22. Equipment used for inspection of metal products.
- 23. Equipment used exclusively for rolling, forging, pressing, drawing, spinning, or extruding either hot or cold metals by some mechanical means.
- 24. Instrument systems utilizing air, natural gas, nitrogen, oxygen, carbon dioxide, helium, neon, argon, krypton, and xenon.
- 25. Battery recharging areas.
- 26. Brazing, soldering, or welding equipment.

Determination of Applicable Requirements

The tables below include the applicability determinations for the emission units, the index number(s) where applicable, and all relevant unit attribute information used to form the basis of the applicability determination. The unit attribute information is a description of the physical properties of an emission unit which is used to determine the requirements to which the permit holder must comply. For more information about the descriptions of the unit attributes specific Unit Attribute Forms may be viewed at www.tceq.texas.gov/permitting/air/nav/air_all_ua_forms.html.

A list of unit attribute forms is included at the end of this document. Some examples of unit attributes include construction date; product stored in a tank; boiler fuel type; etc.. Generally, multiple attributes are needed to determine the requirements for a given emission unit and index number. The table below lists these attributes in the column entitled "Basis of Determination." Attributes that demonstrate that an applicable requirement applies will be the factual basis for the specific citations in an applicable requirement that apply to a unit for that index number. The TCEQ Air Permits Division has developed flowcharts for determining applicability of state and federal regulations based on the unit attribute information in a Decision Support System (DSS). These flowcharts can be accessed via the internet at www.tceq.texas.gov/permitting/air/nav/air_supportsys.html. The Air Permits Division staff may also be contacted for assistance at (512) 239-1250.

The attributes for each unit and corresponding index number provide the basis for determining the specific legal citations in an applicable requirement that apply, including emission limitations or standards, monitoring, recordkeeping, and reporting. The rules were found to apply or not apply by using the unit attributes as answers to decision questions found in the flowcharts of the DSS. Some additional attributes indicate which legal citations of a rule apply. The legal citations that apply to each emission unit may be found in the Applicable Requirements Summary table of the draft permit. There may be some entries or rows of units and rules not found in the permit, or if the permit contains a permit shield, repeated in the permit shield area. These are sets of attributes that describe negative applicability, or; in other words, the reason why a potentially applicable requirement does not apply.

If applicability determinations have been made which differ from the available flowcharts, an explanation of the decisions involved in the applicability determination is specified in the column "Changes and Exceptions to RRT." If there were no exceptions to the DSS, then this column has been removed.

The draft permit includes all emission limitations or standards, monitoring, recordkeeping and reporting required by each applicable requirement. If an applicable requirement does not require monitoring, recordkeeping, or reporting, the word "None" will appear in the Applicable Requirements Summary table. If additional periodic monitoring is required for an applicable requirement, it will be explained in detail in the portion of this document entitled "Rationale for Compliance Assurance Monitoring (CAM)/ Periodic Monitoring Methods Selected."

When attributes demonstrate that a unit is not subject to an applicable requirement, the applicant may request a permit shield for those items. The portion of this document entitled "Basis for Applying Permit Shields" specifies which units, if any, have a permit shield.

Operational Flexibility

When an emission unit has multiple operating scenarios, it will have a different index number associated with each operating condition. This means that units are permitted to operate under multiple operating conditions. The applicable requirements for each operating condition are determined by a unique set of unit attributes. For example, a tank may store two different products at different points in time. The tank may, therefore, need to comply with two distinct sets of requirements, depending on the product that is stored. Both sets of requirements are included in the permit, so that the permit holder may store either product in the tank.

Determination of Applicable Requirements

Unit ID	Regulation	Index Number	Basis of Determination*	Changes and Exceptions to DSS**
05TFL-07D	30 TAC Chapter 115, Storage of VOCs	R5112-079	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria.	
			Tank Description = Tank using an internal floating roof (IFR)	
			Product Stored = VOC other than crude oil or condensate	
			True Vapor Pressure = True vapor pressure is greater than or equal to 1.5 psia	
			Storage Capacity = Capacity is greater than 40,000 gallons	
05TFL-07D	40 CFR Part 60, Subpart K	60K-1	Construction/Modification Date = On or before June 11, 1973	
05TFX-049	30 TAC Chapter 115, Storage of VOCs	R5112-003	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria.	
			Tank Description = Tank does not require emission controls	
			Product Stored = VOC other than crude oil or condensate	
			True Vapor Pressure = True vapor pressure is less than 1.0 psia	
			Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons	
05TFX-049	40 CFR Part 60,	60Kb-2	Product Stored = Volatile organic liquid	
	Subpart Kb		Storage Capacity = Capacity is less than 10,600 gallons (40,000 liters)	
550-TK	30 TAC Chapter 115, Storage of VOCs	R5112-002	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria.	
			Product Stored = VOC other than crude oil or condensate	
			Storage Capacity = Capacity is less than or equal to 1,000 gallons	
550-TK	40 CFR Part 60,	60Kb-2	Product Stored = Volatile organic liquid	
	Subpart Kb		Storage Capacity = Capacity is less than 10,600 gallons (40,000 liters)	
GRP-ADNTK	30 TAC Chapter 115, Storage of VOCs	R5112-056	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria.	
			Tank Description = Tank does not require emission controls	
			Product Stored = VOC other than crude oil or condensate	
			True Vapor Pressure = True vapor pressure is less than 1.0 psia	
			Storage Capacity = Capacity is greater than 40,000 gallons	

Unit ID	Regulation	Index Number	Basis of Determination*	Changes and Exceptions to DSS**
GRP- CYANTK	30 TAC Chapter 115, Storage of VOCs	R5112-079	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria.	
			Tank Description = Tank using an internal floating roof (IFR)	
			Product Stored = VOC other than crude oil or condensate	
			True Vapor Pressure = True vapor pressure is greater than or equal to 1.5 psia	
			Storage Capacity = Capacity is greater than 40,000 gallons	
GRP- CYANTK	40 CFR Part 60, Subpart K	60K-1	Construction/Modification Date = On or before June 11, 1973	
GRP-DTK	30 TAC Chapter 115, Storage of VOCs	R5112-056	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria.	
			Tank Description = Tank does not require emission controls	
			Product Stored = VOC other than crude oil or condensate	
			True Vapor Pressure = True vapor pressure is less than 1.0 psia	
			Storage Capacity = Capacity is greater than 40,000 gallons	
GRP-RTK	30 TAC Chapter 115, Storage of VOCs	R5112-056	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria.	
			Tank Description = Tank does not require emission controls	
			Product Stored = VOC other than crude oil or condensate	
			True Vapor Pressure = True vapor pressure is less than 1.0 psia	
			Storage Capacity = Capacity is greater than 40,000 gallons	
GRP-SWTK	30 TAC Chapter 115, Storage of VOCs	R5112-003	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria.	
			Tank Description = Tank does not require emission controls	
			Product Stored = VOC other than crude oil or condensate	
			True Vapor Pressure = True vapor pressure is less than 1.0 psia	
			Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons	
GRP-SYNCT	30 TAC Chapter 115, Storage of VOCs	R5112-003	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria.	
			Tank Description = Tank does not require emission controls	
			Product Stored = VOC other than crude oil or condensate	
			True Vapor Pressure = True vapor pressure is less than 1.0 psia	

Unit ID	Regulation	Index Number	Basis of Determination*	Changes and Exceptions to DSS**
			Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons	
PE-21P	30 TAC Chapter 115, Storage of VOCs	R5112-003	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria.	
			Tank Description = Tank does not require emission controls	
			Product Stored = VOC other than crude oil or condensate	
			True Vapor Pressure = True vapor pressure is less than 1.0 psia	
			Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons	
PE-34A	30 TAC Chapter 115, Storage of VOCs	R5112-003	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria.	
			Tank Description = Tank does not require emission controls	
			Product Stored = VOC other than crude oil or condensate	
			True Vapor Pressure = True vapor pressure is less than 1.0 psia	
			Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons	
PE-34A	40 CFR Part 61, Subpart FF	61FF-0044	Bypass Line = The closed vent system contains any by-pass line that could divert the vent stream away from the control device.	
			Tank Control Requirements = The tank has a fixed roof and closed vent system routing vapors to either a fuel gas system or control device.	
			Waste Treatment Tank = The tank manages, treats or stores a waste stream subject to 40 CFR Part 61, Subpart FF.	
			Alternative Standard for Tanks = The tank is not complying with the alternative standards in 40 CFR § 61.351.	
			Bypass Line Valve = A car-seal or lock and key configuration are used to secure the bypass line valve in the closed position.	
			Bypass Line Valve = A flow indicator is used to monitor the by-pass line.	
			Fuel Gas System = Gaseous emissions from the tank or enclosure are not routed to a fuel gas system.	
			Control Device Type/Operations = Boiler or process heater having a design heat input capacity greater than or equal to 44 MW and that provides a minimum residence time of 0.5 seconds at a minimum temperature of 760° C	
			Cover and Closed Vent = The cover and closed vent system are not operated such that the tank is maintained at a pressure less than atmospheric pressure and meets the conditions of 40 CFR § 61.343(a)(1)(i)(C)(1) - (3).	
			Closed Vent System and Control Device AMOC = Not using an alternate means of compliance	
			Alternate Monitoring Parameters = Alternate monitoring parameters not requested	

Unit ID	Regulation	Index Number	Basis of Determination*	Changes and Exceptions to DSS**
			Alternative Means of Compliance = Not using an alternate means of compliance to meet the requirements of 40 CFR § 61.343 for tanks.	
PE-34B	40 CFR Part 61, Subpart FF	61FF-0044	Bypass Line = The closed vent system contains any by-pass line that could divert the vent stream away from the control device.	
			Tank Control Requirements = The tank has a fixed roof and closed vent system routing vapors to either a fuel gas system or control device.	
			Waste Treatment Tank = The tank manages, treats or stores a waste stream subject to 40 CFR Part 61, Subpart FF.	
			Alternative Standard for Tanks = The tank is not complying with the alternative standards in 40 CFR § 61.351.	
			Bypass Line Valve = A car-seal or lock and key configuration are used to secure the bypass line valve in the closed position.	
			Bypass Line Valve = A flow indicator is used to monitor the by-pass line.	
			Fuel Gas System = Gaseous emissions from the tank or enclosure are not routed to a fuel gas system.	
			Control Device Type/Operations = Boiler or process heater having a design heat input capacity greater than or equal to 44 MW and that provides a minimum residence time of 0.5 seconds at a minimum temperature of 760° C	
			Cover and Closed Vent = The cover and closed vent system are not operated such that the tank is maintained at a pressure less than atmospheric pressure and meets the conditions of 40 CFR § 61.343(a)(1)(i)(C)(1) - (3).	
			Closed Vent System and Control Device AMOC = Not using an alternate means of compliance	
			Alternate Monitoring Parameters = Alternate monitoring parameters not requested	
			Alternative Means of Compliance = Not using an alternate means of compliance to meet the requirements of 40 CFR § 61.343 for tanks.	
PE-34E	30 TAC Chapter 115, Storage of VOCs	R5112-004	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria.	
			Tank Description = Tank does not require emission controls	
			Product Stored = VOC other than crude oil or condensate	
			True Vapor Pressure = True vapor pressure is greater than or equal to 1.0 psia but less than 1.5 psia	
			Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons	
PE-34E	40 CFR Part 61, Subpart FF	61FF-0044	Bypass Line = The closed vent system contains any by-pass line that could divert the vent stream away from the control device.	
			Tank Control Requirements = The tank has a fixed roof and closed vent system routing vapors to either a fuel gas system or control device.	
			Waste Treatment Tank = The tank manages, treats or stores a waste stream subject to 40 CFR Part 61, Subpart FF.	

Unit ID	Regulation	Index Number	Basis of Determination*	Changes and Exceptions to DSS**
			Alternative Standard for Tanks = The tank is not complying with the alternative standards in 40 CFR § 61.351.	
			Bypass Line Valve = A car-seal or lock and key configuration are used to secure the bypass line valve in the closed position.	
			Bypass Line Valve = A flow indicator is used to monitor the by-pass line.	
			Fuel Gas System = Gaseous emissions from the tank or enclosure are not routed to a fuel gas system.	
			Control Device Type/Operations = Boiler or process heater having a design heat input capacity greater than or equal to 44 MW and that provides a minimum residence time of 0.5 seconds at a minimum temperature of 760° C	
			Cover and Closed Vent = The cover and closed vent system are not operated such that the tank is maintained at a pressure less than atmospheric pressure and meets the conditions of 40 CFR § 61.343(a)(1)(i)(C)(1) - (3).	
			Closed Vent System and Control Device AMOC = Not using an alternate means of compliance	
			Alternate Monitoring Parameters = Alternate monitoring parameters not requested	
			Alternative Means of Compliance = Not using an alternate means of compliance to meet the requirements of 40 CFR § 61.343 for tanks.	
PE-34G	30 TAC Chapter 115, Storage of VOCs	R5112-003	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria.	
			Tank Description = Tank does not require emission controls	
			Product Stored = VOC other than crude oil or condensate	
			True Vapor Pressure = True vapor pressure is less than 1.0 psia	
			Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons	
PE-34G	40 CFR Part 61, Subpart FF	61FF-0044	Bypass Line = The closed vent system contains any by-pass line that could divert the vent stream away from the control device.	
			Tank Control Requirements = The tank has a fixed roof and closed vent system routing vapors to either a fuel gas system or control device.	
			Waste Treatment Tank = The tank manages, treats or stores a waste stream subject to 40 CFR Part 61, Subpart FF.	
			Alternative Standard for Tanks = The tank is not complying with the alternative standards in 40 CFR § 61.351.	
			Bypass Line Valve = A car-seal or lock and key configuration are used to secure the bypass line valve in the closed position.	
			Bypass Line Valve = A flow indicator is used to monitor the by-pass line.	
			Fuel Gas System = Gaseous emissions from the tank or enclosure are not routed to a fuel gas system.	

Unit ID	Regulation	Index Number	Basis of Determination*	Changes and Exceptions to DSS**
			Control Device Type/Operations = Boiler or process heater having a design heat input capacity greater than or equal to 44 MW and that provides a minimum residence time of 0.5 seconds at a minimum temperature of 760° C	
			Cover and Closed Vent = The cover and closed vent system are not operated such that the tank is maintained at a pressure less than atmospheric pressure and meets the conditions of 40 CFR § 61.343(a)(1)(i)(C)(1) - (3).	
			Closed Vent System and Control Device AMOC = Not using an alternate means of compliance	
			Alternate Monitoring Parameters = Alternate monitoring parameters not requested	
			Alternative Means of Compliance = Not using an alternate means of compliance to meet the requirements of 40 CFR § 61.343 for tanks.	
PE-34I	30 TAC Chapter 115, Storage of VOCs	R5112-003	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria.	
			Tank Description = Tank does not require emission controls	
			Product Stored = VOC other than crude oil or condensate	
			True Vapor Pressure = True vapor pressure is less than 1.0 psia	
			Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons	
PE-34I	40 CFR Part 61, Subpart FF	61FF-0044	Bypass Line = The closed vent system contains any by-pass line that could divert the vent stream away from the control device.	
			Tank Control Requirements = The tank has a fixed roof and closed vent system routing vapors to either a fuel gas system or control device.	
			Waste Treatment Tank = The tank manages, treats or stores a waste stream subject to 40 CFR Part 61, Subpart FF.	
			Alternative Standard for Tanks = The tank is not complying with the alternative standards in 40 CFR § 61.351.	
			Bypass Line Valve = A car-seal or lock and key configuration are used to secure the bypass line valve in the closed position.	
			Bypass Line Valve = A flow indicator is used to monitor the by-pass line.	
			Fuel Gas System = Gaseous emissions from the tank or enclosure are not routed to a fuel gas system.	
			Control Device Type/Operations = Boiler or process heater having a design heat input capacity greater than or equal to 44 MW and that provides a minimum residence time of 0.5 seconds at a minimum temperature of 760° C	
			Cover and Closed Vent = The cover and closed vent system are not operated such that the tank is maintained at a pressure less than atmospheric pressure and meets the conditions of 40 CFR § 61.343(a)(1)(i)(C)(1) - (3).	
			Closed Vent System and Control Device AMOC = Not using an alternate means of compliance	
			Alternate Monitoring Parameters = Alternate monitoring parameters not requested	

Unit ID	Regulation	Index Number	Basis of Determination*	Changes and Exceptions to DSS**
			Alternative Means of Compliance = Not using an alternate means of compliance to meet the requirements of 40 CFR § 61.343 for tanks.	
PE-62	30 TAC Chapter 115, Storage of VOCs	R5112-003	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls Product Stored = VOC other than crude oil or condensate True Vapor Pressure = True vapor pressure is less than 1.0 psia Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons	
PJ-14I	30 TAC Chapter 115, Storage of VOCs	R5112-079	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank using an internal floating roof (IFR) Product Stored = VOC other than crude oil or condensate True Vapor Pressure = True vapor pressure is greater than or equal to 1.5 psia Storage Capacity = Capacity is greater than 40,000 gallons	
PJ-14I	40 CFR Part 60, Subpart K	60K-1	Construction/Modification Date = On or before June 11, 1973	
05LBA-048	30 TAC Chapter 115, Loading and Unloading of VOC	R5211-0521	Chapter 115 Facility Type = Marine terminal	
PE-25L	30 TAC Chapter 115, Loading and Unloading of VOC	R5211-0009	Chapter 115 Facility Type = Facility type other than a gasoline terminal, gasoline bulk plant, motor vehicle fuel dispensing facility or marine terminal. Alternate Control Requirement (ACR) = No alternate control requirements are being utilized. Product Transferred = Volatile organic compounds other than liquefied petroleum gas and gasoline. Transfer Type = Only loading. True Vapor Pressure = True vapor pressure less than 0.5 psia.	
PE-25L	30 TAC Chapter 115, Loading and Unloading of VOC	R5211-0522	Chapter 115 Control Device Type = Control device other than a flare, vapor combustor, catalytic incinerator, direct flame incinerator, chiller, or carbon adsorption system. Chapter 115 Facility Type = Facility type other than a gasoline terminal, gasoline bulk plant, motor vehicle fuel dispensing facility or marine terminal. Alternate Control Requirement (ACR) = No alternate control requirements are being utilized. Vapor Tight = Not all liquid and vapor lines are equipped with fittings which make vaportight connections that close automatically when disconnected.	

Unit ID	Regulation	Index Number	Basis of Determination*	Changes and Exceptions to DSS**
			Product Transferred = Volatile organic compounds other than liquefied petroleum gas and gasoline.	
			Transfer Type = Only loading.	
			True Vapor Pressure = True vapor pressure greater than or equal to 0.5 psia.	
			Daily Throughput = Loading greater than or equal to 20,000 gallons per day.	
			Control Options = Vapor control system that maintains a control efficiency of at least 90%.	
PE-25L	40 CFR Part 63, Subpart FFFF	63FFFF-G2L	Unit Type = Group 2 loading rack	The rule citation was determined from an analysis of the rule text and the basis of determination.
PE-40A	30 TAC Chapter 115, Loading and	R5211-0009	Chapter 115 Facility Type = Facility type other than a gasoline terminal, gasoline bulk plant, motor vehicle fuel dispensing facility or marine terminal.	
	Unloading of VOC		Alternate Control Requirement (ACR) = No alternate control requirements are being utilized.	
			Product Transferred = Volatile organic compounds other than liquefied petroleum gas and gasoline.	
			Transfer Type = Only loading.	
			True Vapor Pressure = True vapor pressure less than 0.5 psia.	
GRP-BIF	40 CFR Part 60, Subpart D	60D-001	Construction/Modification Date = On or before August 17, 1971.	
GRP-BIF	40 CFR Part 63,	63EEE-001	ALT Metals = Complying with the particulate matter standards.	For all pollutants, [G]§ 63.1206(c)(4) was removed
	Subpart EEE		Type Fuel = Boiler burns liquid fuel.	from standards, recordkeeping, and reporting because the unit does not have emergency safety
			Existing Source = The boiler is an existing source (construction or reconstruction commenced on or before April 20, 2004).	vents. For Dioxins/Furans, Combined Metals, Total
			Met Feedrate = Feedrate levels are established as 12-hour rolling average limit for semivolatile and low volatile metals.	Chlorine, Principal Organic Hazardous Constituent, and Chromium, § 63.1207(f)(1)(xvii) was removed
			Area Source = The boiler is a major source as defined under §63.2.	from reporting because a surrogate for measuring or monitoring gas flowrate is not used during the
		CO/THC Standard = Complying with the CO standard in § 63 § 63.1217(a)(5)(i) or (b)(5)(i).	CO/THC Standard = Complying with the CO standard in \S 63.1216(a)(5)(i) or (b)(5)(i); or \S 63.1217(a)(5)(i) or (b)(5)(i).	performance test for these pollutants. The following citations were removed because the confirmatory performance test under § 63.1207(b)(2)
			Baghouse = The boiler is not equipped with a baghouse.	
			Dioxin/Furan Standard = Complying with the CO standard in § 63.1217(a)(1)(ii) or (b)(1)(ii).	is not performed: All Pollutants
			Dioxin-Listed = The boiler does not burn the dioxin-listed hazardous wastes F020, F021,	Reporting §§ 63.1207(f)(2)(v)-(x)
			F022, F023, F026, or F027.	<u>Dioxins/Furans</u>
			Heating Value = The hazardous waste as-fired heating value is 10,000 Btu/lb or greater.	Monitoring/Testing §§ [G]63.1207(b)(2),
			DRE Previous Test = Previous testing was used to document conformance with the DRE standard.	63.1207(g)(2)(ii), 63.1207(g)(2)(v) Reporting §§ 63.1207(f)(2)(ii), 63.1207(j)(2)
			Hg Feedrate = Feedrate levels are established as 12-hour rolling average limit for Hg.	Total Chlorine
			Feed Zone = The source feeds waste at the normal flame zone.	Monitoring/Testing § 63.1207(g)(2)(iii)

Unit ID	Regulation	Index Number	Basis of Determination*	Changes and Exceptions to DSS**
				Reporting § 63.1207(f)(2)(iii)
				Total Hydrocarbons/CO
				Monitoring/Testing §§ 63.1207(g)(2)(i), 63.1207(g)(2)(v)
				Reporting § 63.1207(f)(2)(i)
				The following citations were removed because they pertain to types of control devices that are not being used:
				<u>Dioxins/Furans</u>
				Related Standard §§ 63.1209(k)(1)(i), 63.1209(k)(5), [G]63.1209(k)(6)-(9)
				Monitoring/Testing [G]§ 63.1209(k)(8)
				Reporting §§ [G]63.1207(f)(1)(xx)-(xxi), 63.1207(f)(1)(xxii)
				Mercury
				Related Standard § 63.1209(n)(1)
				Combined Metals
				Related Standard § 63.1209(n)(1)
				Total Chlorine
				Related Standard §§ [G]63.1209(o)(3), 63.1209(o)(4)
				Reporting § 63.1207(f)(1)(xxv)
				<u>PM</u>
				Related Standard §§ [G]63.1209(m)(1)(i), [G]63.1209(m)(1)(iv), 63.1209(n)(3)
				Reporting §§ 63.1207(f)(1)(xxii), [G]63.1207(f)(1)(xxiv), 63.1207(f)(2)(iv)
				The following citations were removed because the unit does not have a PM CEMS:
				<u>PM</u>
				Related Standard §§ 63.1206(b)(8)(v)-(vii)
				Monitoring/Testing [G]§ 63.1207(b)(8)(iii)
				The following citations were added to clarify rule applicability:
				<u>Dioxins/Furans</u>
				Monitoring/Testing §§ 63.1207(g)(1)(i), 63.1209(h), [G]63.1209(j), [G]63.1209(k)(4)
				Total Chlorine
				Related Standard [G]§ 63.1215
				<u>PM</u>

Unit ID	Regulation	Index Number	Basis of Determination*	Changes and Exceptions to DSS**
				Monitoring/Testing § 63.1207(f)(1)(xvii)
GRP-BIF	40 CFR Part 63, Subpart EEE	63EEE-002	ALT Metals = Complying with the particulate matter standards. Type Fuel = Boiler burns liquid fuel. Existing Source = The boiler is an existing source (construction or reconstruction commenced on or before April 20, 2004). Met Feedrate = Feedrate levels are established as 12-hour rolling average limit for semivolatile and low volatile metals. Area Source = The boiler is a major source as defined under §63.2. COTHC Standard = Complying with the CO standard in § 63.1216(a)(5)(i) or (b)(5)(i); or § 63.1217(a)(5)(i) or (b)(5)(i). Baghouse = The boiler is not equipped with a baghouse. Dioxin/Furan Standard = Complying with the CO standard in § 63.1217(a)(1)(ii) or (b)(1)(ii). Dioxin-Listed = The boiler does not burn the dioxin-listed hazardous wastes F020, F021, F022, F023, F026, or F027. Heating Value = The hazardous waste as-fired heating value is less than 10,000 Btu/lb. DRE Previous Test = Previous testing was used to document conformance with the DRE standard. Hg Feedrate = Feedrate levels are established as 12-hour rolling average limit for Hg. Feed Zone = The source feeds waste at the normal flame zone.	For all pollutants, [G]§ 63.1206(c)(4) was removed from standards, recordkeeping, and reporting because the unit does not have emergency safety vents. For Dioxins/Furans, Combined Metals, Total Chlorine, Principal Organic Hazardous Constituent, and Chromium, § 63.1207(f)(1)(xvii) was removed from reporting because a surrogate for measuring or monitoring gas flowrate is not used during the performance test for these pollutants. The following citations were removed because the confirmatory performance test under § 63.1207(b)(2) is not performed: All Pollutants Reporting §§ 63.1207(f)(2)(v)-(x) Dioxins/Furans Monitoring/Testing §§ [G]63.1207(b)(2), 63.1207(g)(2)(iii), 63.1207(g)(2)(v) Reporting §§ 63.1207(f)(2)(iii), 63.1207(j)(2) Total Chlorine Monitoring/Testing § 63.1207(g)(2)(iii) Reporting § 63.1207(f)(2)(iii) Total Hydrocarbons/CO Monitoring/Testing §§ 63.1207(g)(2)(i), 63.1207(g)(2)(v) Reporting § 63.1207(f)(2)(i) The following citations were removed because they pertain to types of control devices that are not being used: Dioxins/Furans Related Standard §§ 63.1209(k)(1)(i), 63.1209(k)(5), [G]63.1209(k)(6)-(9) Monitoring/Testing [G]§ 63.1209(k)(8) Reporting §§ [G]63.1207(f)(1)(xx)-(xxi), 63.1207(f)(1)(xxii) Mercury Related Standard § 63.1209(n)(1) Combined Metals Related Standard § 63.1209(n)(1)
				Total Chlorine

Unit ID	Regulation	Index Number	Basis of Determination*	Changes and Exceptions to DSS**
				Related Standard §§ [G]63.1209(o)(3), 63.1209(o)(4)
				Reporting § 63.1207(f)(1)(xxv)
				<u>PM</u>
				Related Standard §§ [G]63.1209(m)(1)(i), [G]63.1209(m)(1)(iv), 63.1209(n)(3)
				Reporting §§ 63.1207(f)(1)(xxii), [G]63.1207(f)(1)(xxiv), 63.1207(f)(2)(iv)
				The following citations were removed because the unit does not have a PM CEMS:
				<u>PM</u>
				Related Standard §§ 63.1206(b)(8)(v)-(vii)
				Monitoring/Testing [G]§ 63.1207(b)(8)(iii)
				The following citations were added to clarify rule applicability:
				<u>Dioxins/Furans</u>
				Monitoring/Testing §§ 63.1207(g)(1)(i), 63.1209(h), [G]63.1209(j), [G]63.1209(k)(4)
				Total Chlorine
				Related Standard [G]§ 63.1215
				<u>PM</u>
				Monitoring/Testing § 63.1207(f)(1)(xvii)
NH3FLARE	30 TAC Chapter 111, Visible	R1111-0001	Acid Gases Only = Flare is not used only as an acid gas flare as defined in 30 TAC § 101.1.	
	Emissions		Emergency/Upset Conditions Only = Flare is used under conditions other than emergency or upset conditions.	
05FUG-050	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	R5352-ALL	SOP/GOP Index No. = Owner/Operator assumes VOC fugitive control requirements for all components subject to 30 TAC Chapter 115, Subchapter D, Division 3 with no alternate control or control device.	
11FUG-015	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	R5352-ALL	SOP/GOP Index No. = Owner/Operator assumes VOC fugitive control requirements for all components subject to 30 TAC Chapter 115, Subchapter D, Division 3 with no alternate control or control device.	
FD-27	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	R5352-ALL	SOP/GOP Index No. = Owner/Operator assumes VOC fugitive control requirements for all components subject to 30 TAC Chapter 115, Subchapter D, Division 3 with no alternate control or control device.	
MEOH-FUG	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	R5352-1	Title 30 TAC § 115.352 Applicable = Site is not a petroleum refinery, synthetic organic chemical, polymer resin or methyl tert-butyl ether manufacturing process nor a natural gas/gasoline processing operation as defined in 30 TAC 115.10.	

Unit ID	Regulation	Index Number	Basis of Determination*	Changes and Exceptions to DSS**
MEOH-FUG	40 CFR Part 60, Subpart VV	60VV-2	Produces Chemicals = The fugitive unit is not part of a facility that produces as an intermediate or final product one or more of the chemicals listed in 40 CFR § 60.489.	
PE-FUG	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	R5352-ALL	SOP/GOP Index No. = Owner/Operator assumes VOC fugitive control requirements for all components subject to 30 TAC Chapter 115, Subchapter D, Division 3 with no alternate control or control device.	
PE-FUG	40 CFR Part 60, Subpart VV	60VV-1	Produces Chemicals = The fugitive unit is part of a facility that produces as an intermediate or final product one or more of the chemicals listed in 40 CFR § 60.489. Affected Facility = The fugitive unit is part of a facility that is an affected facility as defined in 40 CFR § 60.480(a)(2). Construction/Modification Date = On or before January 5, 1981.	
PE-OS	30 TAC Chapter 115, Water Separation	R5131-0003	Alternate Control Requirement = The executive director (or the EPA Administrator) has not approved an ACR or exemption criteria in accordance with 30 TAC § 115.910. Exemption = Any single or multiple compartment VOC water separator which separates materials having a true vapor pressure less than 0.5 psia (3.4 kPa) obtained from any equipment.	
GRP-ANLZV	30 TAC Chapter 115, Vent Gas Controls	R5121-0004	Chapter 115 Division = The vent stream does not originate from a source for which another Division in 30 TAC Chapter 115 establishes a control requirement, emission specification, or exemption for that source. Combustion Exhaust = The vent stream is not from a combustion unit exhaust or the combustion unit is used as a control device for a vent stream originating from a noncombustion source subject to 30 TAC Chapter 115, Subchapter B, Division 2. Vent Type = Title 30 TAC Chapter 115, Subchapter B, Vent Gas Control rules are applicable and the vent is not specifically classified under the rule. Combined 24-Hour VOC Weight = Combined VOC weight is less than or equal to 100 pounds (45.4 kg). VOC Concentration/Emission Rate @ Max Operating Conditions = The VOC concentration or emission rate is less than the applicable exemption limit at maximum actual operating conditions and the alternate recordkeeping requirements of 30 TAC § 115.126(4) are being selected.	
GRP-DIST	30 TAC Chapter 115, Vent Gas Controls	R5121-0024	Alternate Control Requirement = Alternate control is not used. Chapter 115 Division = The vent stream does not originate from a source for which another Division in 30 TAC Chapter 115 establishes a control requirement, emission specification, or exemption for that source. Total Design Capacity = Total design capacity is greater than or equal to 1,100 tons per year for all chemicals produced within that unit. Combustion Exhaust = The vent stream is not from a combustion unit exhaust or the combustion unit is used as a control device for a vent stream originating from a noncombustion source subject to 30 TAC Chapter 115, Subchapter B, Division 2. Flow Rate or VOC Concentration = Flow rate is greater than or equal to 0.011 scm/min or the VOC concentration is greater than or equal to 500 ppmv.	

Unit ID	Regulation	Index Number	Basis of Determination*	Changes and Exceptions to DSS**
			40 CFR 60 Subpart NNN Requirements = The distillation unit vent gas stream satisfies neither of the following requirements of 40 CFR Part 60, Subpart NNN: TRE index value is greater than 8.0; or TRE index value is greater than 1.0 without the use of VOC emission control devices.	
			Control Device Type = Vapor recovery system, as defined in 30 TAC § 115.10, other than an afterburner, blast furnace combustion device, boiler, catalytic or direct flame incinerator, carbon adsorption system, chiller, flare or vapor combustor.	
			Vent Type = Vent gas stream originates from a synthetic organic chemical manufacturing industry reactor process or distillation operation, as defined in 30 TAC § 115.10.	
			40 CFR 60 Subpart RRR Requirements = The reactor process vent gas stream satisfies neither of the following requirements of 40 CFR Part 60, Subpart RRR: TRE index value is greater than 8.0; or TRE index value is greater than 1.0 without the use of VOC emission control devices.	
GRP-STK	30 TAC Chapter 111, Visible	R1111-0111	Alternate Opacity Limitation = Not complying with an alternate opacity limit under 30 TAC § 111.113.	
	Emissions		Vent Source = The source of the vent is not a steam generator fired by solid fossil fuel, oil or a mixture of oil and gas and is not a catalyst regenerator for a fluid bed catalytic cracking unit.	
			Opacity Monitoring System = Optical instrument capable of measuring the opacity of emissions is not installed in the vent or optical instrumentation does not meet the requirements of § 111.111(a)(1)(D), or the vent stream does not qualify for the exemption in § 111.111(a)(3).	
			Construction Date = On or before January 31, 1972	
			Effluent Flow Rate = Effluent flow rate is at least 100,000 actual cubic feet per minute.	
PE-20	30 TAC Chapter 115, Vent Gas Controls	R5121-0006	Chapter 115 Division = The vent stream does not originate from a source for which another Division in 30 TAC Chapter 115 establishes a control requirement, emission specification, or exemption for that source.	
			Combustion Exhaust = The vent stream is not from a combustion unit exhaust or the combustion unit is used as a control device for a vent stream originating from a noncombustion source subject to 30 TAC Chapter 115, Subchapter B, Division 2.	
			Vent Type = Title 30 TAC Chapter 115, Subchapter B, Vent Gas Control rules are applicable and the vent is not specifically classified under the rule.	
			Combined 24-Hour VOC Weight = Combined VOC weight is less than or equal to 100 pounds (45.4 kg).	
			VOC Concentration/Emission Rate @ Max Operating Conditions = The VOC concentration or emission rate is less than the applicable exemption limit at maximum actual operating conditions and the alternate recordkeeping requirements of 30 TAC § 115.126(4) are being selected.	
PE-21	30 TAC Chapter 115, Vent Gas Controls	R5121-0015	Alternate Control Requirement = Alternate control is not used. Chapter 115 Division = The vent stream does not originate from a source for which another Division in 30 TAC Chapter 115 establishes a control requirement, emission specification, or exemption for that source.	

Unit ID	Regulation	Index Number	Basis of Determination*	Changes and Exceptions to DSS**
			Combustion Exhaust = The vent stream is not from a combustion unit exhaust or the combustion unit is used as a control device for a vent stream originating from a noncombustion source subject to 30 TAC Chapter 115, Subchapter B, Division 2.	
			Control Device Type = Vapor recovery system, as defined in 30 TAC § 115.10, other than an afterburner, blast furnace combustion device, boiler, catalytic or direct flame incinerator, carbon adsorption system, chiller, flare or vapor combustor.	
			Vent Type = Title 30 TAC Chapter 115, Subchapter B, Vent Gas Control rules are applicable and the vent is not specifically classified under the rule.	
PE-21H	30 TAC Chapter	R5121-0026	Alternate Control Requirement = Alternate control is not used.	
	115, Vent Gas Controls		Chapter 115 Division = The vent stream does not originate from a source for which another Division in 30 TAC Chapter 115 establishes a control requirement, emission specification, or exemption for that source.	
			Total Design Capacity = Total design capacity is greater than or equal to 1,100 tons per year for all chemicals produced within that unit.	
			Combustion Exhaust = The vent stream is not from a combustion unit exhaust or the combustion unit is used as a control device for a vent stream originating from a noncombustion source subject to 30 TAC Chapter 115, Subchapter B, Division 2.	
			Flow Rate or VOC Concentration = Flow rate is greater than or equal to 0.011 scm/min or the VOC concentration is greater than or equal to 500 ppmv.	
			40 CFR 60 Subpart NNN Requirements = The distillation unit vent gas stream satisfies neither of the following requirements of 40 CFR Part 60, Subpart NNN: TRE index value is greater than 8.0; or TRE index value is greater than 1.0 without the use of VOC emission control devices.	
			Control Device Type = Vapor recovery system, as defined in 30 TAC § 115.10, other than an afterburner, blast furnace combustion device, boiler, catalytic or direct flame incinerator, carbon adsorption system, chiller, flare or vapor combustor.	
			Vent Type = Vent gas stream originates from a synthetic organic chemical manufacturing industry reactor process or distillation operation, as defined in 30 TAC § 115.10.	
			40 CFR 60 Subpart RRR Requirements = The reactor process vent gas stream satisfies neither of the following requirements of 40 CFR Part 60, Subpart RRR: TRE index value is greater than 8.0; or TRE index value is greater than 1.0 without the use of VOC emission control devices.	
PE-25S	30 TAC Chapter	R5121-0024	Alternate Control Requirement = Alternate control is not used.	
	115, Vent Gas Controls		Chapter 115 Division = The vent stream does not originate from a source for which another Division in 30 TAC Chapter 115 establishes a control requirement, emission specification, or exemption for that source.	
			Total Design Capacity = Total design capacity is greater than or equal to 1,100 tons per year for all chemicals produced within that unit.	
			Combustion Exhaust = The vent stream is not from a combustion unit exhaust or the combustion unit is used as a control device for a vent stream originating from a noncombustion source subject to 30 TAC Chapter 115, Subchapter B, Division 2.	

Unit ID	Regulation	Index Number	Basis of Determination*	Changes and Exceptions to DSS**	
			Flow Rate or VOC Concentration = Flow rate is greater than or equal to 0.011 scm/min or the VOC concentration is greater than or equal to 500 ppmv.		
			40 CFR 60 Subpart NNN Requirements = The distillation unit vent gas stream satisfies neither of the following requirements of 40 CFR Part 60, Subpart NNN: TRE index value is greater than 8.0; or TRE index value is greater than 1.0 without the use of VOC emission control devices.		
			Control Device Type = Vapor recovery system, as defined in 30 TAC § 115.10, other than an afterburner, blast furnace combustion device, boiler, catalytic or direct flame incinerator, carbon adsorption system, chiller, flare or vapor combustor.		
			Vent Type = Vent gas stream originates from a synthetic organic chemical manufacturing industry reactor process or distillation operation, as defined in 30 TAC § 115.10.		
			40 CFR 60 Subpart RRR Requirements = The reactor process vent gas stream satisfies neither of the following requirements of 40 CFR Part 60, Subpart RRR: TRE index value is greater than 8.0; or TRE index value is greater than 1.0 without the use of VOC emission control devices.		
PE-41	30 TAC Chapter 115, Vent Gas Controls	R5121-0006	Chapter 115 Division = The vent stream does not originate from a source for which another Division in 30 TAC Chapter 115 establishes a control requirement, emission specification, or exemption for that source.		
			Combustion Exhaust = The vent stream is not from a combustion unit exhaust or the combustion unit is used as a control device for a vent stream originating from a noncombustion source subject to 30 TAC Chapter 115, Subchapter B, Division 2.		
			Vent Type = Title 30 TAC Chapter 115, Subchapter B, Vent Gas Control rules are applicable and the vent is not specifically classified under the rule.		
			Combined 24-Hour VOC Weight = Combined VOC weight is less than or equal to 100 pounds (45.4 kg).		
			VOC Concentration/Emission Rate @ Max Operating Conditions = The VOC concentration or emission rate is less than the applicable exemption limit at maximum actual operating conditions and the alternate recordkeeping requirements of 30 TAC § 115.126(4) are being selected.		
PE-65	PE-65 30 TAC Chapter 115, Degreasing Processes		R5412-0018	Solvent Degreasing Machine Type = Cold solvent cleaning machine.	
			Alternate Control Requirement = The TCEQ Executive Director has not approved an alternative control requirement as allowed under 30 TAC § 115.413 or not alternative has been requested.		
			Solvent Sprayed = No solvent is sprayed.		
			Solvent Vapor Pressure = Solvent vapor pressure is less than or equal to 0.6 psia as measured at 100 degrees Fahrenheit.		
			Solvent Heated = The solvent is not heated to a temperature greater than 120° F.		
			Parts Larger than Drainage = No cleaned parts for which the machine is authorized to clean are larger than the internal drainage facility of the machine.		
			Drainage Area = Area is greater than or equal to 16 square inches.		
			Disposal in Enclosed Containers = Waste solvent is properly disposed of in enclosed containers.		

Unit ID	Regulation	Index Number	Basis of Determination*	Changes and Exceptions to DSS**
0268-9013-5	40 CFR Part 60, Subpart NNN	60NNN-0002	Subpart NNN Chemicals = The distillation unit produces any chemical listed in 40 CFR § 60.667 as a product, co-product, by-product, or intermediate. Construction/Modification Date = On or before December 30, 1983.	
GRP-DIST	40 CFR Part 60, Subpart NNN	60NNN-0002	Subpart NNN Chemicals = The distillation unit produces any chemical listed in 40 CFR § 60.667 as a product, co-product, by-product, or intermediate. Construction/Modification Date = On or before December 30, 1983.	
PE-21A	40 CFR Part 60, Subpart NNN	60NNN-0002	Subpart NNN Chemicals = The distillation unit produces any chemical listed in 40 CFR § 60.667 as a product, co-product, by-product, or intermediate. Construction/Modification Date = On or before December 30, 1983.	
PE-25S	40 CFR Part 60, Subpart NNN	60NNN-0002	Subpart NNN Chemicals = The distillation unit produces any chemical listed in 40 CFR § 60.667 as a product, co-product, by-product, or intermediate. Construction/Modification Date = On or before December 30, 1983.	
PE-25DH	30 TAC Chapter 115, Industrial Wastewater	R5142-0017	Petroleum Refinery = The affected source category is not a petroleum refinery. Wastewater Component Type = The component is not a wet weather retention basin, exempted by §115.147(2), not a biotreatment unit. Alternate Control Requirement = An alternate control requirement (ACR) or exemption criteria in accordance with 30 TAC § 115.910 is not used. Roof or Seal Type = The wastewater component does not have a floating roof or internal floating roof. Control Devices = Enclosed non-catalytic combustion device. 90% Overall Control Option = The unit is complying with the control requirements of 30 TAC § 115.142. Monitoring Type = The monitoring requirements of 30 TAC §§ 115.144(3)(A) - (H) are being used. Safety Hazard Exemption = No safety hazard exemption has been requested or none has been approved.	Monitoring/Testing [G]§115.145(3) was removed because the unit is not controlled by a flare or vapor combustor.
PE-25EH	30 TAC Chapter 115, Industrial Wastewater	R5142-0017	Petroleum Refinery = The affected source category is not a petroleum refinery. Wastewater Component Type = The component is not a wet weather retention basin, exempted by §115.147(2), not a biotreatment unit. Alternate Control Requirement = An alternate control requirement (ACR) or exemption criteria in accordance with 30 TAC § 115.910 is not used. Roof or Seal Type = The wastewater component does not have a floating roof or internal floating roof. Control Devices = Enclosed non-catalytic combustion device. 90% Overall Control Option = The unit is complying with the control requirements of 30 TAC § 115.142.	Monitoring/Testing [G]§115.145(3) was removed because the unit is not controlled by a flare or vapor combustor.

Unit ID	Regulation	Index Number	Der Basis of Determination* Changes and Exception	
			Monitoring Type = The monitoring requirements of 30 TAC §§ 115.144(3)(A) - (H) are being used.	
			Safety Hazard Exemption = No safety hazard exemption has been requested or none has been approved.	
PE-34B	30 TAC Chapter	R5142-0017	Petroleum Refinery = The affected source category is not a petroleum refinery.	Monitoring/Testing [G]§115.145(3) was removed
	115, Industrial Wastewater		Wastewater Component Type = The component is not a wet weather retention basin, exempted by §115.147(2), not a biotreatment unit.	because the unit is not controlled by a flare or vapor combustor.
			Alternate Control Requirement = An alternate control requirement (ACR) or exemption criteria in accordance with 30 TAC § 115.910 is not used.	
			Roof or Seal Type = The wastewater component does not have a floating roof or internal floating roof.	
			Control Devices = Enclosed non-catalytic combustion device.	
			90% Overall Control Option = The unit is complying with the control requirements of 30 TAC § 115.142.	
			Monitoring Type = The monitoring requirements of 30 TAC §§ 115.144(3)(A) - (H) are being used.	
			Safety Hazard Exemption = No safety hazard exemption has been requested or none has been approved.	
PE-25H 40 CFR Part 61,		1, 61FF-0001	Unit Type = Individual drain system	
	Subpart FF	FF	CLOSED VENT SYSTEM AND CONTROL DEVICE AMOC = Complying with the requirements of § 61.349	
			By-pass Line = System contains by-pass line that could divert stream from the control device.	
			By-pass Line Valve = Car-seal or lock-and-key is used to secure by-pass line valve in the closed position.	
			By-pass Line Valve = A flow monitor is used to monitor the by-pass line.	
			Control Device Type/Operation = Boiler or process heater having a design heat input capacity greater than or equal to 44 MW and that provides a minimum residence time of 0.5 seconds at a minimum temperature of 760° C.	
			Engineering Calculations = Engineering calculations show that the control device is proven to achieve its emission limitation.	
			Alternate Monitoring Parameters = Complying with the monitoring parameters in § 61.354 for the control device.	
PRO-BIF	40 CFR Part 61, Subpart FF	PRO-PE25H/34B	AMOC = An alternate means of compliance (AMOC) to meet the requirements of 40 CFR § 61.348 for treatment processes is not used.	Related Standard § 61.348(c)(1) was added as a requirement for providing engineering calculations or
			By-Pass Line = The closed-vent system contains a by-pass line that could divert the vent stream away from the control device.	performance data to prove that standards are being achieved.
			By-Pass Line Valve = A flow indicator monitors the flow into the by-pass line.	

Unit ID	Regulation	Index Number	Basis of Determination*	Changes and Exceptions to DSS**
			Treatment Stream Unit Exempt = There are not units in the wastewater treatment system that are exempt according to 40 CFR § 61.348(b)(2).	
			Complying with § 61.342(e) = The facility is not complying with 40 CFR § 61.342(e).	
			Control Device Type/Operation = Boiler or process heater having a design heat input capacity greater than or equal to 44 MW and that achieves a total organic compound concentration of 20 ppmv on a dry basis corrected to 3% oxygen.	
			Openings = The treatment process or wastewater treatment system unit has no openings.	
			Fuel Gas System = Not all gaseous vent streams from the treatment process or wastewater treatment system are routed to a fuel gas system.	
			Stream Combination = The process wastewater, product tank drawdown, or landfill leachate is not combined with other waste streams for the purpose of facilitating management or treatment in the wastewater treatment system.	
			Benzene Removal = Benzene is removed from the waste stream by 99% or more on a mass basis.	
			Engineering Calculations = Engineering calculations show that the control device is proven to achieve its emission limitation.	
			Alternate Monitoring Parameters = Alternate monitoring parameters or requirements have not been approved by the Administrator or have not been requested.	
			Closed-Vent System and Control Device = A closed-vent system and control device is used.	
			Process Or Stream Exemption = The treatment process or waste stream is not complying with 40 CFR §61.348(d).	
			AMOC = No alternate means of compliance (AMOC) to meet the requirements of 40 CFR § 61.349 for a closed-vent system and control device is used.	
			Carbon Replacement Interval = The carbon in the carbon adsorption system is replaced on indication of breakthrough.	
			Treatment Process Engineering Calculations = Engineering calculations show that the treatment process or wastewater treatment system unit is proven to achieve its emission limitation.	
PROADIPM ON	40 CFR Part 63, Subpart FFFF	63FFFF-PRO2	>1000 lb/yr = The process has uncontrolled hydrogen halide and halogen HAP emissions from process vents of less than 1,000 lb/yr.	
			Ammonium Sulfate = The MCPU does not include the manufacture of ammonium sulfate as a by-product, or the slurry entering the by-product manufacturing process contains 50 parts per million by weight (ppmw) HAP or less or 10 ppmw benzene or less.	
			Startup 2003 = The affected source startup was before November 10, 2003.	
			Other Operations = The MCPU includes operations other than those listed in § 63.2435(c).	
			Shared Batch Vent = The MCPU does not include a batch process vent that also is part of a CMPU as defined in subparts F and G of this part 63.	
			63.100 CMPU = The MCPU is not a CMPU defined in § 63.100.	
			New Source = The MCPU is an existing affected source.	

Unit ID	Regulation	Index Number	Basis of Determination*	Changes and Exceptions to DSS**
			PUG = The MCPU is not part of a process unit group (PUG).	
			G2/<1000 lb/yr = The process does not include Group 2 batch process vents and/or uncontrolled hydrogen halide and halogen HAP emissions from the sum of all batch and continuous process vents less than 1,000 lb/yr.	
			Startup 2002 = The affected source initial startup was before April 4, 2002.	
			PP Alt = The MCPU is complying with the emission limitations and work practice standards contained in Tables 1 through 7.	
			Batch Process Vents = The source does not include batch process vents.	
PROHMDM ON	40 CFR Part 63, Subpart FFFF	63FFFF-PRO2	>1000 lb/yr = The process has uncontrolled hydrogen halide and halogen HAP emissions from process vents of less than 1,000 lb/yr.	
			Ammonium Sulfate = The MCPU does not include the manufacture of ammonium sulfate as a by-product, or the slurry entering the by-product manufacturing process contains 50 parts per million by weight (ppmw) HAP or less or 10 ppmw benzene or less.	
			Startup 2003 = The affected source startup was before November 10, 2003.	
			Other Operations = The MCPU includes operations other than those listed in § 63.2435(c).	
			Shared Batch Vent = The MCPU does not include a batch process vent that also is part of a CMPU as defined in subparts F and G of this part 63.	
			63.100 CMPU = The MCPU is not a CMPU defined in § 63.100.	
			New Source = The MCPU is an existing affected source.	
			PUG = The MCPU is not part of a process unit group (PUG).	
			G2/<1000 lb/yr = The process does not include Group 2 batch process vents and/or uncontrolled hydrogen halide and halogen HAP emissions from the sum of all batch and continuous process vents less than 1,000 lb/yr.	
			Startup 2002 = The affected source initial startup was before April 4, 2002.	
			PP Alt = The MCPU is complying with the emission limitations and work practice standards contained in Tables 1 through 7.	
			Batch Process Vents = The source does not include batch process vents.	

^{* -} The "unit attributes" or operating conditions that determine what requirements apply

** - Notes changes made to the automated results from the DSS, and a brief explanation why

NSR Versus Title V FOP

The state of Texas has two Air permitting programs, New Source Review (NSR) and Title V Federal Operating Permits. The two programs are substantially different both in intent and permit content.

NSR is a preconstruction permitting program authorized by the Texas Clean Air Act and Title I of the Federal Clean Air Act (FCAA). The processing of these permits is governed by 30 Texas Administrative Code (TAC) Chapter 116.111. The Title V Federal Operating Program is a federal program authorized under Title V of the FCAA that has been delegated to the state of Texas to administer and is governed by 30 TAC Chapter 122. The major differences between the two permitting programs are listed in the table below:

NSR Permit	Federal Operating Permit(FOP)
Issued Prior to new Construction or modification of an existing facility	For initial permit with application shield, can be issued after operation commences; significant revisions require approval prior to operation.
Authorizes air emissions	Codifies existing applicable requirements, does not authorize new emissions
Ensures issued permits are protective of the environment and human health by conducting a health effects review and that requirement for best available control technology (BACT) is implemented.	Applicable requirements listed in permit are used by the inspectors to ensure proper operation of the site as authorized. Ensures that adequate monitoring is in place to allow compliance determination with the FOP.
Up to two Public notices may be required. Opportunity for public comment and contested case hearings for some authorizations.	One public notice required. Opportunity for public comments. No contested case hearings.
Applies to all point source emissions in the state.	Applies to all major sources and some non-major sources identified by the EPA.
Applies to facilities: a portion of site or individual emission sources	One or multiple FOPs cover the entire site (consists of multiple facilities)
Permits include terms and conditions under which the applicant must construct and operate its various equipment and processes on a facility basis.	Permits include terms and conditions that specify the general operational requirements of the site; and also include codification of all applicable requirements for emission units at the site.
Opportunity for EPA review for Federal Prevention of Significant Deterioration (PSD) and Nonattainment (NA) permits for major sources.	Opportunity for EPA review, Affected states review, and a Public petition period for every FOP.
Permits have a table listing maximum emission limits for pollutants	Permit has an applicable requirements table and Periodic Monitoring (PM) / Compliance Assurance Monitoring (CAM) tables which document applicable monitoring requirements.
Permits can be altered or amended upon application by company. Permits must be issued before construction or modification of facilities can begin.	Permits can be revised through several revision processes, which provide for different levels of public notice and opportunity to comment. Changes that would be significant revisions require that a revised permit be issued before those changes can be operated.
NSR permits are issued independent of FOP requirements.	FOP are independent of NSR permits, but contain a list of all NSR permits incorporated by reference

New Source Review Requirements

Below is a list of the New Source Review (NSR) permits for the permitted area. These NSR permits are incorporated by reference into the operating permit and are enforceable under it. These permits can be found in the main TCEQ file room,

located on the first floor of Building E, 12100 Park 35 Circle, Austin, Texas. In addition, many of the permits are accessible online through the link provided below. The Public Education Program may be contacted at 1-800-687-4040 or the Air Permits Division (APD) may be contacted at 1-512-239-1250 for help with any question.

Additionally, the site contains emission units that are permitted by rule under the requirements of 30 TAC Chapter 106, Permits by Rule. Permit by Rule (PBR) registrations submitted by permittees are also available online through the link provided below. The following table specifies the PBRs that apply to the site.

The TCEQ has interpreted the emission limits prescribed in 30 TAC §106.4(a) as both emission thresholds and default emission limits. The emission limits in 30 TAC §106.4(a) are all considered applicable to each facility as a threshold matter to ensure that the owner/operator qualifies for the PBR authorization. Those same emission limits are also the default emission limits if the specific PBR does not further limit emissions or there is no lower, certified emission limit claimed by the owner/operator.

This interpretation is consistent with how TCEQ has historically determined compliance with the emission limits prior to the addition of the "as applicable" language. The "as applicable" language was added in 2014 as part of changes to the sentence structure in a rulemaking that made other changes to address greenhouse gases and was not intended as a substantive rule change. This interpretation also provides for effective and practical enforcement of 30 TAC §106.4(a), since for the TCEQ to effectively enforce the emission limits in 30 TAC §106.4(a) as emission thresholds, all emission limits must apply. As provided by 30 TAC §106.4(a)(2) and (3), an owner/operator shall not claim a PBR authorization if the facility is subject to major New Source Review. The practical and legal effect of the language in 30 TAC § 106.4 is that if a facility does not emit a pollutant, then the potential to emit for that particular pollutant is zero, and thus, the facility is not authorized to emit the pollutant pursuant to the PBR.

The status of air permits, applications, and PBR registrations may be found by performing the appropriate search of the databases located at the following website:

www.tceq.texas.gov/permitting/air/nav/air_status_permits.html

Details on how to search the databases are available in the **Obtaining Permit Documents** section below.

New Source Review Authorization References

Title 30 TAC Chapter 116 Permits, Special Permits, and Other Authorizations (Other Than Permits By Rule, PSD Permits, or NA Permits) for the Application Area.				
Authorization No.: 1303	Issuance Date: 05/08/2018			
Authorization No.: 1387	Issuance Date: 08/28/2015			
Authorization No.: 1790	Issuance Date: 11/29/2016			
Permits By Rule (30 TAC Chapter 106) for the	Application Area			
Number: 106.261	Version No./Date: 11/01/2003			
Number: 106.262	Version No./Date: 11/01/2003			
Number: 106.263	Version No./Date: 11/01/2001			
Number: 106.454	Version No./Date: 07/08/1998			
Number: 106.472	Version No./Date: 03/14/1997			
Number: 106.511	Version No./Date: 03/14/1997			

Emission Units and Emission Points

In air permitting terminology, any source capable of generating emissions (for example, an engine or a sandblasting area) is called an Emission Unit. For purposes of Title V, emission units are specifically listed in the operating permit when they have applicable requirements other than New Source Review (NSR), or when they are listed in the permit shield table.

The actual physical location where the emissions enter the atmosphere (for example, an engine stack or a sand-blasting yard) is called an emission point. For New Source Review preconstruction permitting purposes, every emission unit has an associated emission point. Emission limits are listed in an NSR permit, associated with an emission point. This list of emission points and emission limits per pollutant is commonly referred to as the "Maximum Allowable Emission Rate Table", or "MAERT" for short. Specifically, the MAERT lists the Emission Point Number (EPN) that identifies the emission point, followed immediately by the Source Name, identifying the emission unit that is the source of those emissions on this table.

Thus, by reference, an emission unit in a Title V operating permit is linked by reference number to an NSR authorization, and its related emission point.

Monitoring Sufficiency

Federal and state rules, 40 CFR § 70.6(a)(3)(i)(B) and 30 TAC § 122.142(c) respectively, require that each federal operating permit include additional monitoring for applicable requirements that lack periodic or instrumental monitoring (which may include recordkeeping that serves as monitoring) that yields reliable data from a relevant time period that are representative of the emission unit's compliance with the applicable emission limitation or standard. Furthermore, the federal operating permit must include compliance assurance monitoring (CAM) requirements for emission sources that meet the applicability criteria of 40 CFR Part 64 in accordance with 40 CFR § 70.6(a)(3)(i)(A) and 30 TAC § 122.604(b).

With the exception of any emission units listed in the Periodic Monitoring or CAM Summaries in the FOP, the TCEQ Executive Director has determined that the permit contains sufficient monitoring, testing, recordkeeping, and reporting requirements that assure compliance with the applicable requirements. If applicable, each emission unit that requires additional monitoring in the form of periodic monitoring or CAM is described in further detail under the Rationale for CAM/PM Methods Selected section following this paragraph.

Rationale for Compliance Assurance Monitoring (CAM)/ Periodic Monitoring Methods Selected

Compliance Assurance Monitoring (CAM):

Compliance Assurance Monitoring (CAM) is a federal monitoring program established under Title 40 Code of Federal Regulations Part 64 (40 CFR Part 64).

Emission units are subject to CAM requirements if they meet the following criteria:

- 1. the emission unit is subject to an emission limitation or standard for an air pollutant (or surrogate thereof) in an applicable requirement;
- 2. the emission unit uses a control device to achieve compliance with the emission limitation or standard specified in the applicable requirement; and
- 3. the emission unit has the pre-control device potential to emit greater than or equal to the amount in tons per year for a site to be classified as a major source.

The following table(s) identify the emission unit(s) that are subject to CAM:

Unit/Group/Process Information					
ID No.: GRP-DIST					
Control Device ID No.: B5	Control Device Type: Steam Generating Unit (Boiler)/Process Heater (Design heat input is greater than or equal to 44MW)				
Control Device ID No.: B7	Control Device Type: Steam Generating Unit (Boiler)/Process Heater (Design heat input is greater than or equal to 44MW)				
Control Device ID No.: B8	Control Device Type: Steam Generating Unit (Boiler)/Process Heater (Design heat input is greater than or equal to 44MW)				
Applicable Regulatory Requirement					
Name: 30 TAC Chapter 115, Vent Gas Controls	SOP Index No.: R5121-0024				
Pollutant: VOC	Main Standard: § 115.122(a)(2)				
Monitoring Information					
Indicator: Period of Operation					
Minimum Frequency: n/a					
Averaging Period: n/a					
Deviation Limit: All periods of boiler operation that are not recorded when the vapor stream from GRP-DIST is routed to the unit.					

Basis of CAM: A common way to control VOC emissions is to route emissions to a boiler or process heater with a design heat input capacity of 44 MW or greater with minimum temperatures of 1100 °C and residence times greater than one second. Boilers and process heaters with the stated design have demonstrated to meet 98% reduction efficiency; therefore, it is only necessary to document the period of operation of the control equipment. Additionally, in the October, 21, 1983 preamble to 40 CFR Part 60, Subpart III, (48 FR 48945), the EPA determined that installing a steam generating unit, with a design heat input capacity of 44 MW or greater, to control VOC emissions, is an acceptable means of demonstrating compliance with 40 CFR Part 60, Subpart III and waived the requirement for a performance test on such devices. Monitoring the period of operation of a boiler/process heater greater than 44 MW is commonly required in federal rules, including: 40 CFR Part 60, Subparts III and NNN; 40 CFR Part 61, Subpart BB; 40 CFR Part 63, Subpart G.

Unit/Group/Process Information ID No.: PE-21 Control Device ID No.: PE-21 Control Device Type: Absorber (Direct Absorption) **Applicable Regulatory Requirement** Name: 30 TAC Chapter 115, Vent Gas Controls SOP Index No.: R5121-0015 Pollutant: VOC Main Standard: § 115.122(a)(1) **Monitoring Information** Indicator: VOC concentration and flow rate

Minimum Frequency: Once per 12 hours

Averaging Period: 12-hour period

Deviation Limit: VOC concentration and flow rate indicates VOC removal efficiency is less than 90%

Basis of CAM: Monitoring both the VOC concentration at the outlet and the liquid flow rate is appropriate for direct absorption because these parameters can be used in a material balance to determine the VOC removal efficiency. If the removal efficiency decreases, this can indicate that the absorbing liquid is reaching saturation. It can also indicate mechanical problems with the absorption system, such as uneven distribution of the absorbing liquid due to malfunctions in the liquid pumping equipment or blockage of pipes and spray nozzles.

Unit/Group/Process Information				
ID No.: PE-25L				
Control Device ID No.: B5	Control Device Type: Steam Generating Unit (Boiler)/Process Heater (Design heat input is greater than or equal to 44MW)			
Control Device ID No.: B7	Control Device Type: Steam Generating Unit (Boiler)/Process Heater (Design heat input is greater than or equal to 44MW)			
Control Device ID No.: B8	Control Device Type: Steam Generating Unit (Boiler)/Process Heater (Design heat input is greater than or equal to 44MW)			
Applicable Regulatory Requirement				
Name: 30 TAC Chapter 115, Loading and Unloading of VOC	SOP Index No.: R5211-0522			
Pollutant: VOC	Main Standard: § 115.212(a)(1)			
Monitoring Information				
Indicator: Period of Operation				

Minimum Frequency: n/a

Averaging Period: n/a

Deviation Limit: All periods of boiler operation that are not recorded when the vapor stream from PE-25L is routed to the unit.

Basis of CAM: A common way to control VOC emissions is to route emissions to a boiler or process heater with a design heat input capacity of 44 MW or greater with minimum temperatures of 1100 °C and residence times greater than one second. Boilers and process heaters with the stated design have demonstrated to meet 98% reduction efficiency; therefore, it is only necessary to document the period of operation of the control equipment. Additionally, in the October, 21, 1983 preamble to 40 CFR Part 60, Subpart III, (48 FR 48945), the EPA determined that installing a steam generating unit, with a design heat input capacity of 44 MW or greater, to control VOC emissions, is an acceptable means of demonstrating compliance with 40 CFR Part 60, Subpart III and waived the requirement for a performance test on such devices. Monitoring the period of operation of a boiler/process heater greater than 44 MW is commonly required in federal rules, including: 40 CFR Part 60, Subparts III and NNN; 40 CFR Part 61, Subpart BB; 40 CFR Part 63, Subpart G.

Unit/Group/Process Information			
ID No.: PE-25S			
Control Device ID No.: B5	Control Device Type: Steam Generating Unit (Boiler)/Process Heater (Design heat input is greater than or equal to 44MW)		
Control Device ID No.: B7	Control Device Type: Steam Generating Unit (Boiler)/Process Heater (Design heat input is greater than or equal to 44MW)		
Control Device ID No.: B8	Control Device Type: Steam Generating Unit (Boiler)/Process Heater (Design heat input is greater than or equal to 44MW)		
Applicable Regulatory Requirement			
Name: 30 TAC Chapter 115, Vent Gas Controls	SOP Index No.: R5121-0024		
Pollutant: VOC	Main Standard: § 115.122(a)(2)		
Monitoring Information			
Indicator: Period of Operation			
Minimum Frequency: n/a			
Averaging Period: n/a			
Deviation Limit: All periods of boiler operation that are not recorded when the vapor stream from PE-25S is routed to the unit.			

Basis of CAM: A common way to control VOC emissions is to route emissions to a boiler or process heater with a design heat input capacity of 44 MW or greater with minimum temperatures of 1100 °C and residence times greater than one second. Boilers and process heaters with the stated design have demonstrated to meet 98% reduction efficiency; therefore, it is only necessary to document the period of operation of the control equipment. Additionally, in the October, 21, 1983 preamble to 40 CFR Part 60, Subpart III, (48 FR 48945), the EPA determined that installing a steam generating unit, with a design heat input capacity of 44 MW or greater, to control VOC emissions, is an acceptable means of demonstrating compliance with 40 CFR Part 60, Subpart III and waived the requirement for a performance test on such devices. Monitoring the period of operation of a boiler/process heater greater than 44 MW is commonly required in federal rules, including: 40 CFR Part 60, Subparts III and NNN; 40 CFR Part 61, Subpart BB; 40

CFR Part 63, Subpart G.

Periodic Monitoring:

The Federal Clean Air Act requires that each federal operating permit include monitoring sufficient to assure compliance with the terms and conditions of the permit. Most of the emission limits and standards applicable to emission units at Title V sources include adequate monitoring to show that the units meet the limits and standards. For those requirements that do not include monitoring, or where the monitoring is not sufficient to assure compliance, the federal operating permit must include such monitoring for the emission units affected. The following emission units are subject to periodic monitoring requirements because the emission units are subject to an emission limitation or standard for an air pollutant (or surrogate thereof) in an applicable requirement that does not already require monitoring, or the monitoring for the applicable requirement is not sufficient to assure compliance:

Unit/Group/Process Information		
ID No.: GRP-STK		
Control Device ID No.: N/A	Control Device Type: N/A	
Applicable Regulatory Requirement		
Name: 30 TAC Chapter 111, Visible Emissions	SOP Index No.: R1111-0111	
Pollutant: Opacity	Main Standard: § 111.111(a)(1)(C)	
Monitoring Information		
Indicator: Opacity		
Minimum Frequency: Once per month		
Averaging Period: Six-minutes		
Deviation Limit: Opacity greater than 15%.		
Basis of monitoring:		

Basis of monitoring:

The option to perform opacity readings or visible emissions to demonstrate compliance is consistent with EPA Reference Test Method 9 and 22. Opacity and visible emissions have been used as an indicator of particulate emissions in many federal rules including 40 CFR Part 60, Subpart F and Subpart HH. In addition, use of these indicators is consistent with the EPA's "Compliance Assurance Monitoring (CAM) Technical Guidance Document" (August 1998). Monitoring specifications and procedures for the opacity are consistent with federal requirements and include the EPA's Test Method 9 for determining opacity by visual observations and the requirements of 40 CFR § 60.13 for a continuous opacity monitoring system (COMS). The monitoring specifications and procedures for the visible emissions monitoring are similar to "EPA Reference Method 22" procedures.

Unit/Group/Process Information		
ID No.: PE-65		
Control Device ID No.: N/A	Control Device Type: N/A	
Applicable Regulatory Requirement		
Name: 30 TAC Chapter 115, Degreasing Processes	SOP Index No.: R5412-0018	
Pollutant: VOC	Main Standard: § 115.412(1)	
Monitoring Information		
Indicator: Visual Inspection		

Minimum Frequency: Monthly

Averaging Period: n/a

Deviation Limit: Any monitoring data which indicates that the cold cleaner is not in compliance with the applicable requirements of 30 TAC § 115.412(1)(A)-(F) is a deviation.

Basis of monitoring:

The monitoring option to cover cold cleaner or the open-top vapor cleaner was included in the EPA "Periodic Monitoring Technical Reference Document" (April 1999) to monitor VOC sources. In addition to covering the cleaner records of monthly inspections of equipment is an effective way to ensure that the system is operating in accordance with its design.

Obtaining Permit Documents

The New Source Review Authorization References table in the FOP specifies all NSR authorizations that apply at the permit area covered by the FOP. Individual NSR permitting files are located in the TCEQ Central File Room (TCEQ Main Campus located at 12100 Park 35 Circle, Austin, Texas, 78753, Building E, Room 103). They can also be obtained electronically from TCEQ's Central File Room Online (https://www.tceq.texas.gov/goto/cfr-online). Guidance documents that describe how to search electronic records, including Permits by Rule (PBRs) or NSR permits incorporated by reference into an FOP, archived in the Central File Room server are available at https://www.tceq.texas.gov/permitting/air/nav/air_status_permits.html

All current PBRs are contained in Chapter 106 and can be viewed at the following website:

https://www.tceq.texas.gov/permitting/air/permitbyrule/air_pbr_index.html

Previous versions of 30 TAC Chapter 106 PBRs may be viewed at the following website:

www.tceq.texas.gov/permitting/air/permitbyrule/historical rules/old106list/index106.html

Historical Standard Exemption lists may be viewed at the following website:

www.tceq.texas.gov/permitting/air/permitbyrule/historical_rules/oldselist/se_index.html

Additional information concerning PBRs is available on the TCEQ website:

https://www.tceg.texas.gov/permitting/air/nav/air pbr.html

Compliance Review

1. In accordance with 30 TAC Chapter 60, the compliance history was reviewed on February 5, 2019.
Site rating: 10.36 / Satisfactory Company rating: 7.10 / Satisfactory
(High < 0.10; Satisfactory ≥ 0.10 and ≤ 55; Unsatisfactory > 55)
2. Has the permit changed on the basis of the compliance history or site/company rating?No

Site/Permit Area Compliance Status Review

1.	Were there any out-of-compliance units listed on Form OP-ACPS?	N	(
	Is a compliance plan and schedule included in the permit?		

Available Unit Attribute Forms

- OP-UA2 Stationary Reciprocating Internal Combustion Engine Attributes
- OP-UA3 Storage Tank/Vessel Attributes
- OP-UA4 Loading/Unloading Operations Attributes
- OP-UA5 Process Heater/Furnace Attributes
- OP-UA6 Boiler/Steam Generator/Steam Generating Unit Attributes
- OP-UA7 Flare Attributes
- OP-UA8 Coal Preparation Plant Attributes
- OP-UA9 Nonmetallic Mineral Process Plant Attributes
- OP-UA10 Gas Sweetening/Sulfur Recovery Unit Attributes
- **OP-UA11 Stationary Turbine Attributes**
- OP-UA12 Fugitive Émission Unit Attributes
- OP-UA13 Industrial Process Cooling Tower Attributes
- **OP-UA14 Water Separator Attributes**
- OP-UA15 Emission Point/Stationary Vent/Distillation Operation/Process Vent Attributes
- OP-UA16 Solvent Degreasing Machine Attributes
- OP-UA17 Distillation Unit Attributes
- OP-UA18 Surface Coating Operations Attributes

- OP-UA19 Wastewater Unit Attributes
- OP-UA20 Asphalt Operations Attributes
- OP-UA21 Grain Elevator Attributes
- OP-UA22 Printing Attributes
- OP-UA24 Wool Fiberglass Insulation Manufacturing Plant Attributes
- OP-UA25 Synthetic Fiber Production Attributes
- OP-UA26 Electroplating and Anodizing Unit Attributes
- OP-UA27 Nitric Acid Manufacturing Attributes
- OP-UA28 Polymer Manufacturing Attributes
- OP-UA29 Glass Manufacturing Unit Attributes
- OP-UA30 Kraft, Soda, Sulfite, and Stand-Alone Semichemical Pulp Mill Attributes
- OP-UA31 Lead Smelting Attributes
- OP-UA32 Copper and Zinc Smelting/Brass and Bronze Production Attributes
- OP-UA33 Metallic Mineral Processing Plant Attributes
- OP-UA34 Pharmaceutical Manufacturing
- OP-UA35 Incinerator Attributes
- OP-UA36 Steel Plant Unit Attributes
- OP-UA37 Basic Oxygen Process Furnace Unit Attributes
- OP-UA38 Lead-Acid Battery Manufacturing Plant Attributes
- OP-UA39 Sterilization Source Attributes
- OP-UA40 Ferroalloy Production Facility Attributes
- OP-UA41 Dry Cleaning Facility Attributes
- OP-UA42 Phosphate Fertilizer Manufacturing Attributes
- OP-UA43 Sulfuric Acid Production Attributes
- OP-UA44 Municipal Solid Waste Landfill/Waste Disposal Site Attributes
- OP-UA45 Surface Impoundment Attributes
- OP-UA46 Epoxy Resins and Non-Nylon Polyamides Production Attributes
- OP-UA47 Ship Building and Ship Repair Unit Attributes
- OP-UA48 Air Oxidation Unit Process Attributes
- OP-UA49 Vacuum-Producing System Attributes
- OP-UA50 Fluid Catalytic Cracking Unit Catalyst Regenerator/Fuel Gas Combustion Device/Claus Sulfur Recovery Plant Attributes
- OP-UA51 Dryer/Kiln/Oven Attributes
- OP-UA52 Closed Vent Systems and Control Devices
- OP-UA53 Beryllium Processing Attributes
- OP-UA54 Mercury Chlor-Alkali Cell Attributes
- OP-UA55 Transfer System Attributes
- OP-UA56 Vinyl Chloride Process Attributes
- OP-UA57 Cleaning/Depainting Operation Attributes
- **OP-UA58 Treatment Process Attributes**
- OP-UA59 Coke By-Product Recovery Plant Attributes
- OP-UA60 Chemical Manufacturing Process Unit Attributes
- OP-UA61 Pulp, Paper, or Paperboard Producing Process Attributes
- OP-UA62 Glycol Dehydration Unit Attributes
- OP-UA63 Vegetable Oil Production Attributes